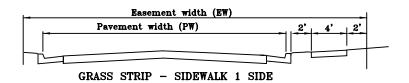
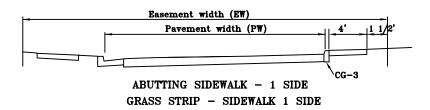


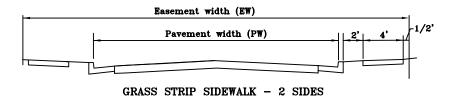
ABUTTING SIDEWALK - 1 SIDE



	* NO PARKING ft	NO PARKING ft	ONB	PARKING ONE SIDE ft	PARKING BOTH SIDES ft	PARKING BOTH SIDES ft
₽₩	24	26	30	30	36	36
EW	30	32	36	36	42	42
EW	32	N/A	38	N/A	44	N/A
EW	34	36	40	40	46	46
EW	38	40	44	44	50	50
EW	38	N/A	44	N/A	50	N/A

* Generations less than 250 TPD



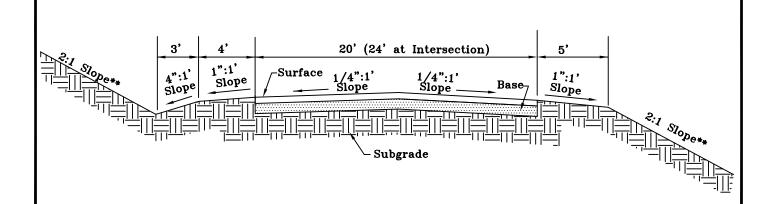


NOTES:

- 1. For pavement section, see Section 7-0502.
- 2. Trails shall be in seperate easements when provided.
- 3. Optional curb and gutter standards CG-6, CG-6R, CG-7, and CG-7R. Curb cut, driveway and storm structure transition details will be provided when CG-7 and CG-7R are used.
- 4. For single family detached condominium, single family detached (only in those zoning districts where permitted), patios and garden courts with 5 or less lots, geometrics of street may conform to pipestem lot standards.

 Methods and details for providing adequate turnarounds shall be as required by the Director.
- 5. Sidewalks and trails shall be provided in accordance with Section 8-0000 et seq.
- 6. For all entrances, a 3/4" lip shall be maintained across the frontage of the driveway at the gutter pan.

Ref. Sec. 7-0101.2, 7-0103, 7-0105.1, 7-0406.7B, 7-0502.1A	PRIVATE STREETS	PLATE NO.	STD. NO.
Rev. 1-00, 2011 Reprint	TOWNHOUSE, PATIO, GARDEN COURT, ETC.	4-7	TS-5A



	ADT	Type of	Max. Grade	Speed			nt Dist. (ft.)	Pavement Width (P)	Esmt. Width (centered on	
Į		Terrain	"%	Limit MPH	Radius (ft.)	Stopping	Intersection	(ft.)	rd.) (ft.)	
	0-250	Rolling	9*	15	155	125	200	20	30***	

This standard section is applicable to subdivisions which are approved for R-C cluster development.

This standard section is required on private streets in R-C cluster developments. This standard is not required for private streets in a 5-acre subdivision, not subject to the subdivision ordinance.

Base course is based on a subgrade CBR value of 10. Where CBR is less than 10, 1" of base material shall be added for each point below CBR 10. Where CBR is more than 10, subbase may be reduced 1" for each 5 points above CBR-10. All special designs are subject to the approval of the Director.

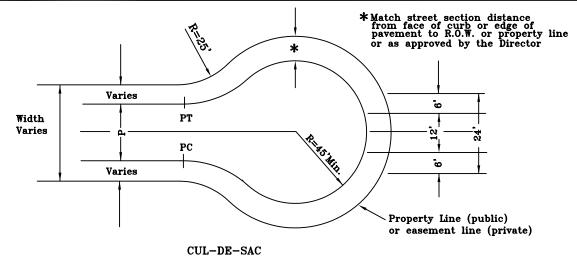
A 6" Aggregate Base Course, Type I or II is required. The surface course shall be prime coat and double seal surface treatment or prime coat and 100 LB/SY bituminous concrete, Type SM - 9.5A.

The construction must be inspected by the County.

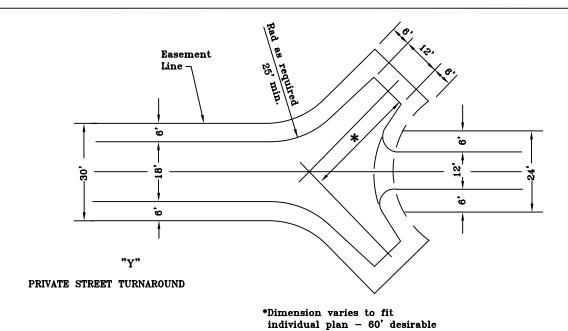
All materials and construction of this design shall conform to the current VDOT Road and Bridge Specifications and VDOT Road and Bridge Standards.

- * Max. % of grade may be increased to 15% for relatively short lengths with the approval of the Director Pavement widths shall be increased to 24' at intersection locations.
- ** Slope may be increased to $1 \frac{1}{2} : 1$ for heights not exceeding 10', subject to approval of Director.
- *** See Section 7-0101.3 for easement widths to adjoining properties that are landlocked.

Ref. Sec. 2-0102.3, 7-0101, 7-0101.2, 7-0105.1, 7-0404.6A,	STANDARD TYPICAL SECTION	PLATE NO.	STD. NO.
7-0405.3, 7-0406.7B	R-C CLUSTER	c r	ma ≈
Rev. 1-00. 11-05, 2-06, 4-07, 2011 Reprint	SUBDIVISION STREETS	6-7	TS-7



PUBLIC OR PRIVATE STREET TURNAROUND



NOTES:

Turnarounds shall be provided at the end of all public streets, both permanent and temporary except those streets covered by the stub street criteria.

Construction methods shall conform to the Typical Street Standards as presented in this PFM.

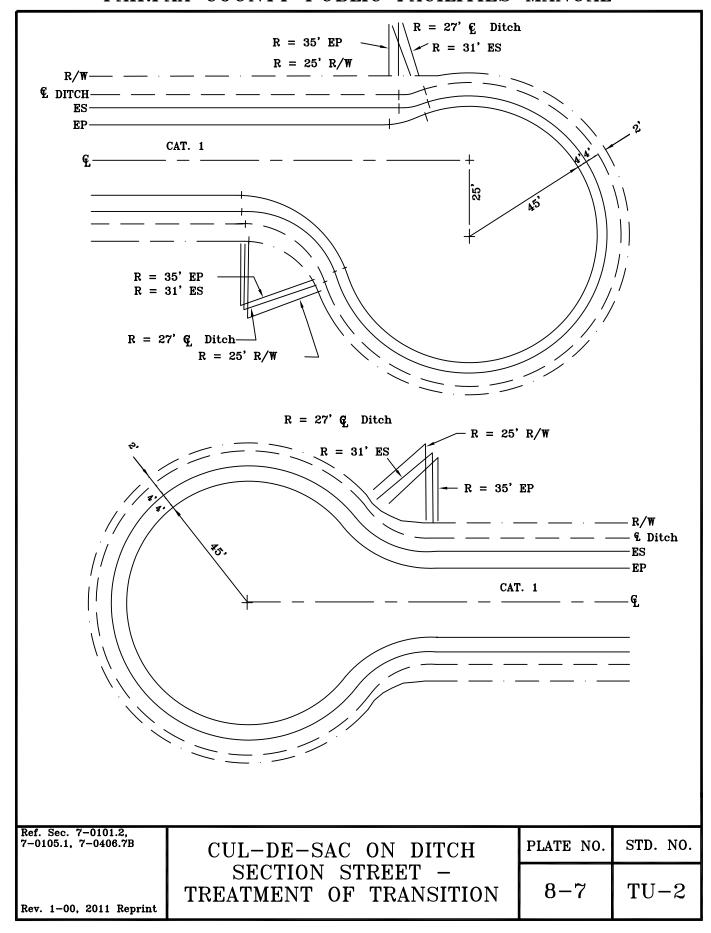
Temporary turnarounds at ends of streets to be extended at some future date:

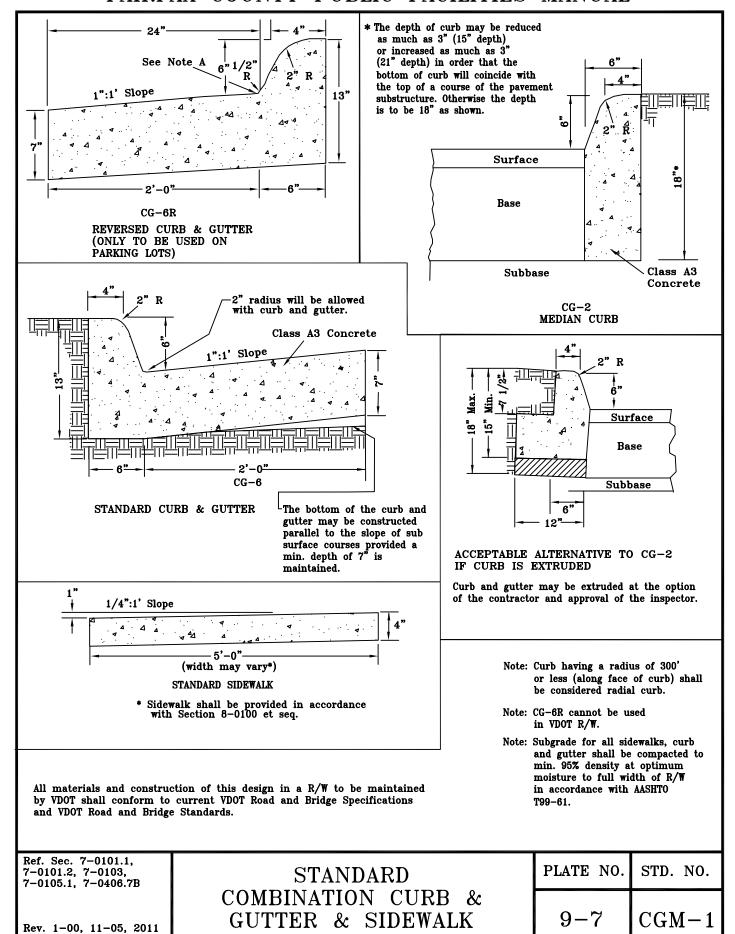
- 1. Geometrics shall conform to cul-de-sac standard.
- 2. Typical section shall conform to TS-1 or TS-2 Standard for subbase and base requirements. The surface shall be temporary 2-shot treatment.

Sidewalks, when required on cul-de-sac streets, shall be provided within the right-of-way and extend around the cul-de-sac to a point which is at least one-half of the distance between the PC and PT of the cul-de-sac. At the point at which the sidewalk terminates standard CG-12 shall be provided.

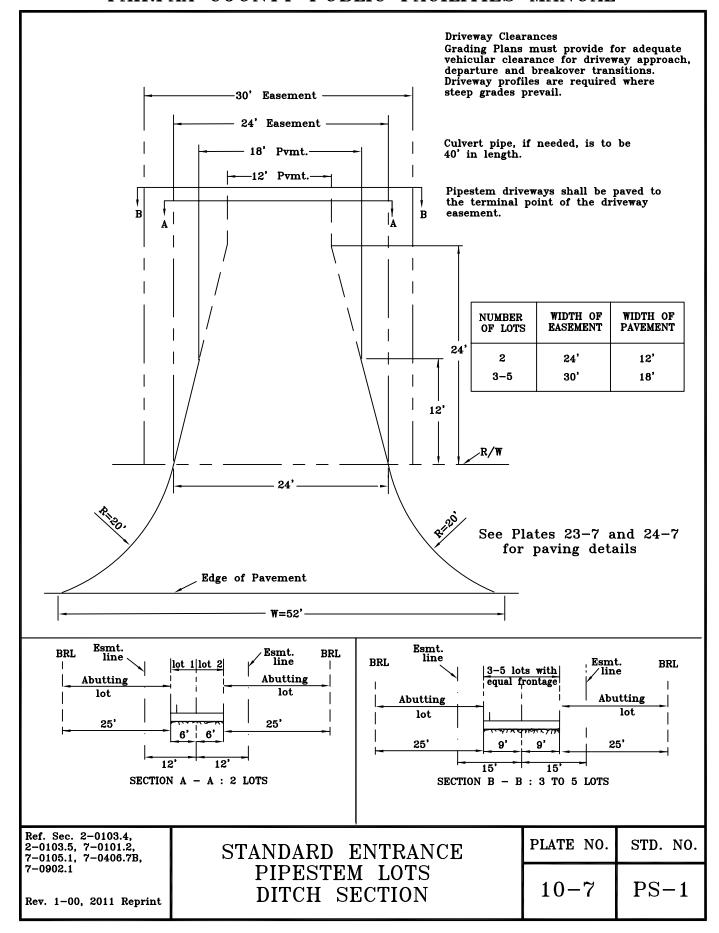
Sidewalk shall be provided in accordance with Section 8-0100 et seq.

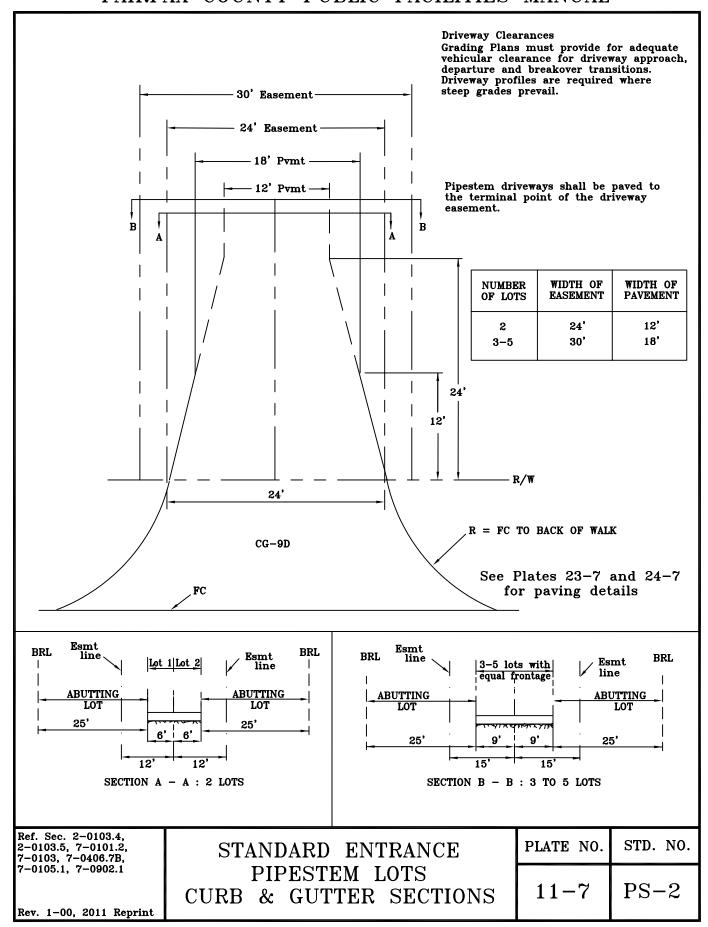
Ref. Sec. 7-0101.2, 7-0103, 7-0406.7B, 7-0105.1, 7-0902.1	TYPICAL STANDARD FOR	PLATE NO.	STD. NO.
Rev. 1-00, 11-05, 2011 Reprint	CUL-DE-SAC AND "Y" TURNAROUND	7-7	TU-1

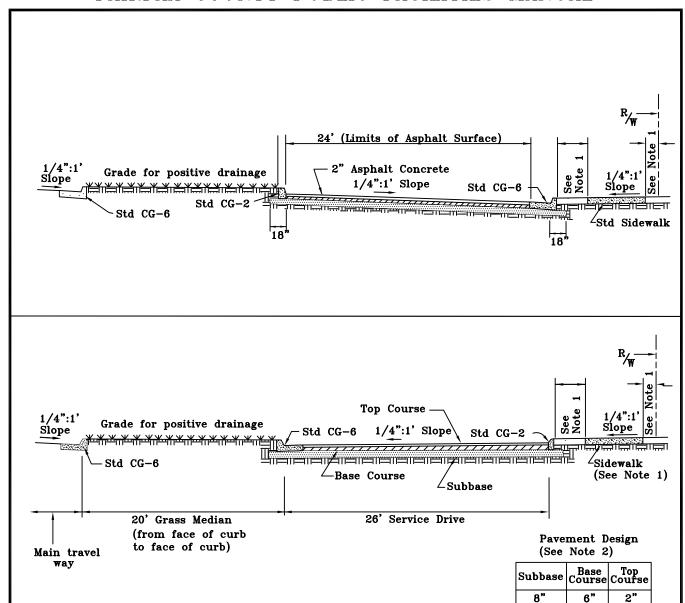




Reprint



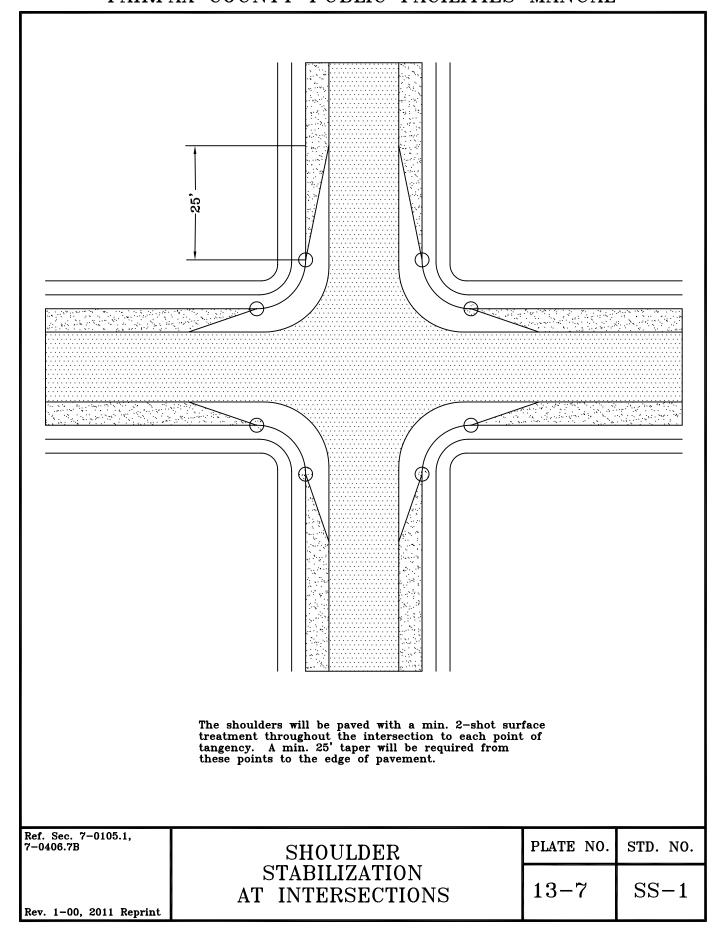


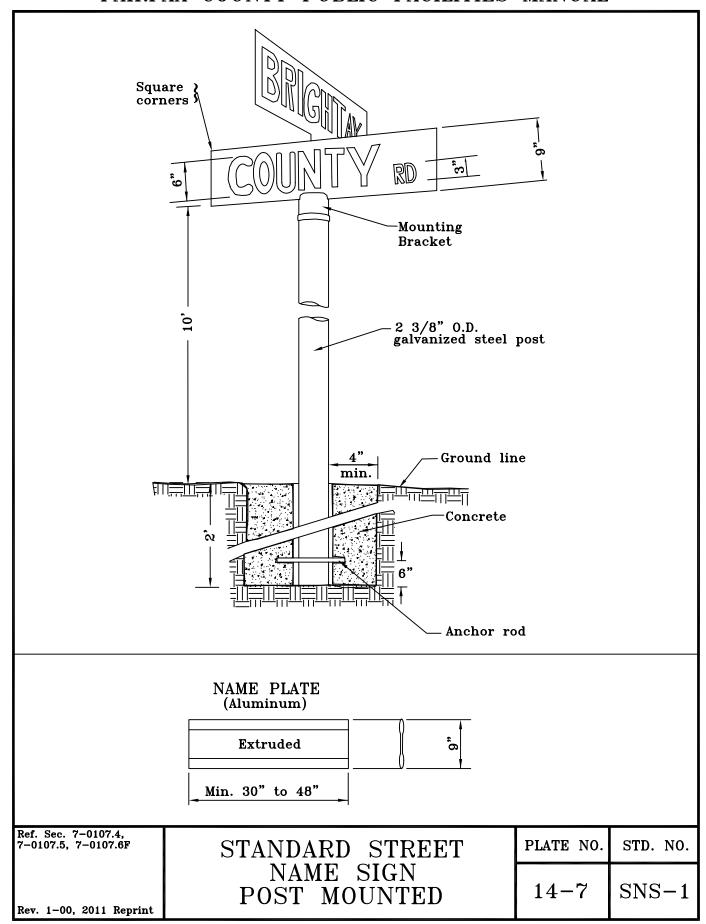


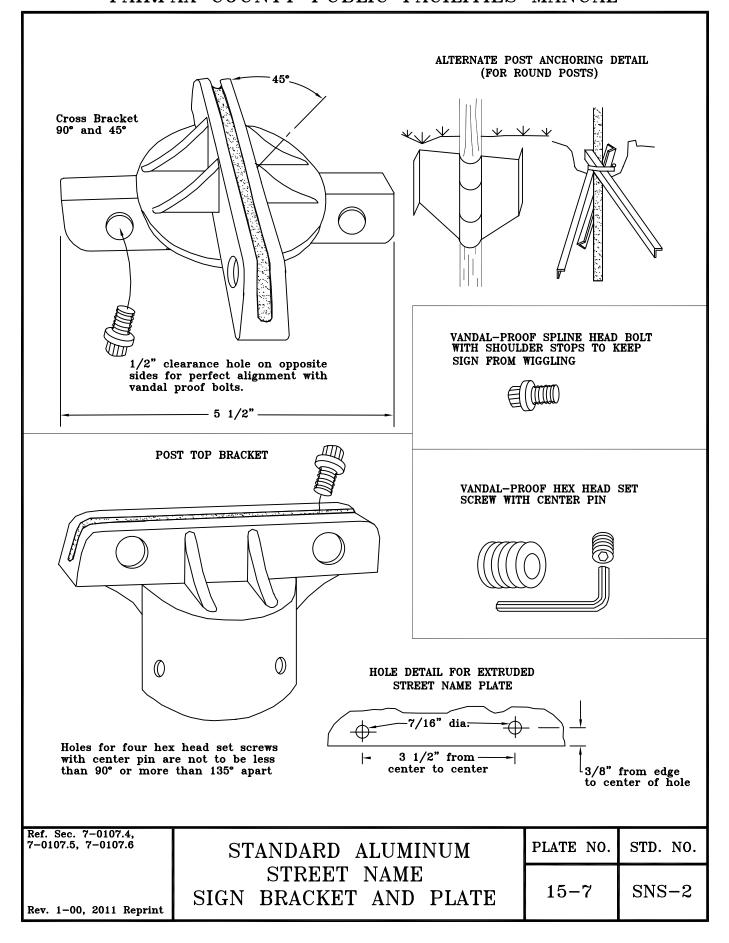
NOTES:

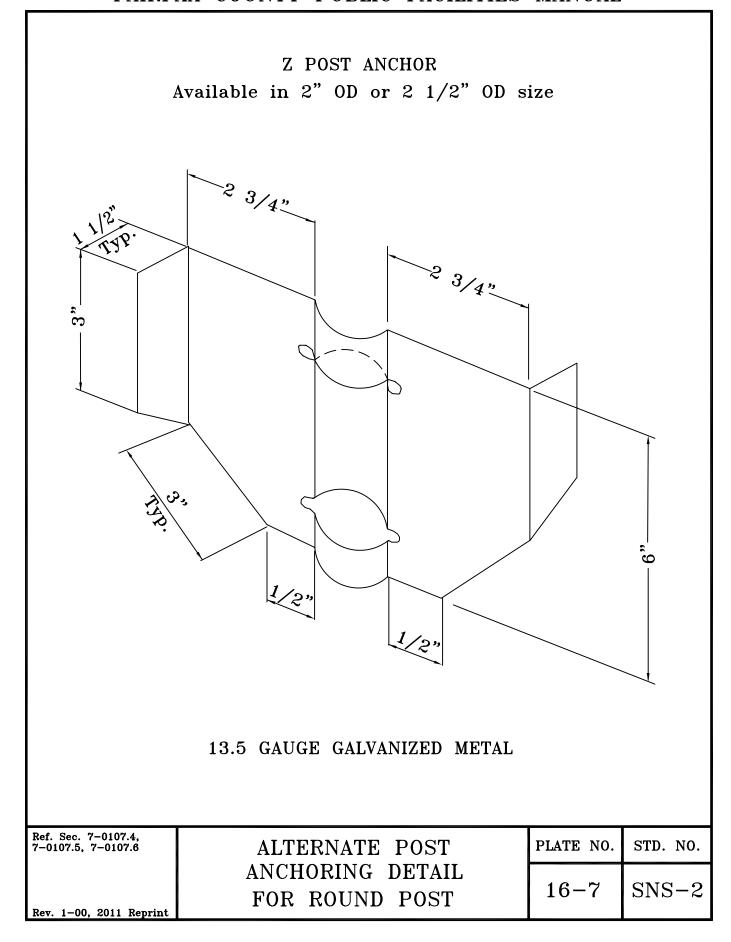
- 1) Distance between back of curb to sidewalk, width of sidewalk, and distance between sidewalk and right-of-way line shall be in accordance with the current Appendix B of the VDOT Road Design Manual. VDOT will accept sidewalk, which is a minimum of 1' from the right-of-way line.
- 2) Surface, base and subbase designs are predicated upon a subgrade CBR value which equals or exceeds a value of 10. Pavement design and materials shall be in accordance with the current VDOT Pavement Design Guide for Subdivision and Secondary Roads in Virginia.

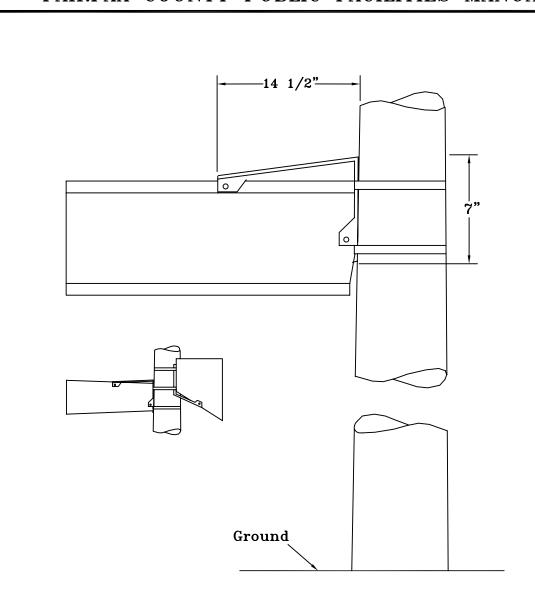
Ref. Sec. 7-0103, 7-0104.2, 7-0105.1, 7-0406.7B	STANDARD TYPICAL STREET CONSTRUCTION SECTION	PLATE NO.	STD. NO.
Rev. 1-00, 4-07, 2011 Reprint	FOR SERVICE DRIVES WITH CURB & GUTTER	12-7	TS-3







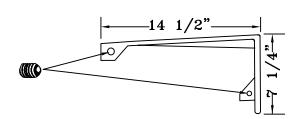




At signalized intersections, street name signs for both streets will be installed on all vertical supports for the traffic signals. Signs will be mounted with standard aluminum cantilevered pole mounted street name brackets.

At signalized intersections, the bottom of the lowest street name sign will be 16' above ground level.

Ref. Sec. 7-0107.4, 7-0107.5, 7-0107.6	STANDARD ALUMINUM CANTILEVERED POLE	PLATE NO.	STD. NO.
Rev. 1-00, 2011 Reprint	MOUNTED STREET NAME	17-7	SNS-3

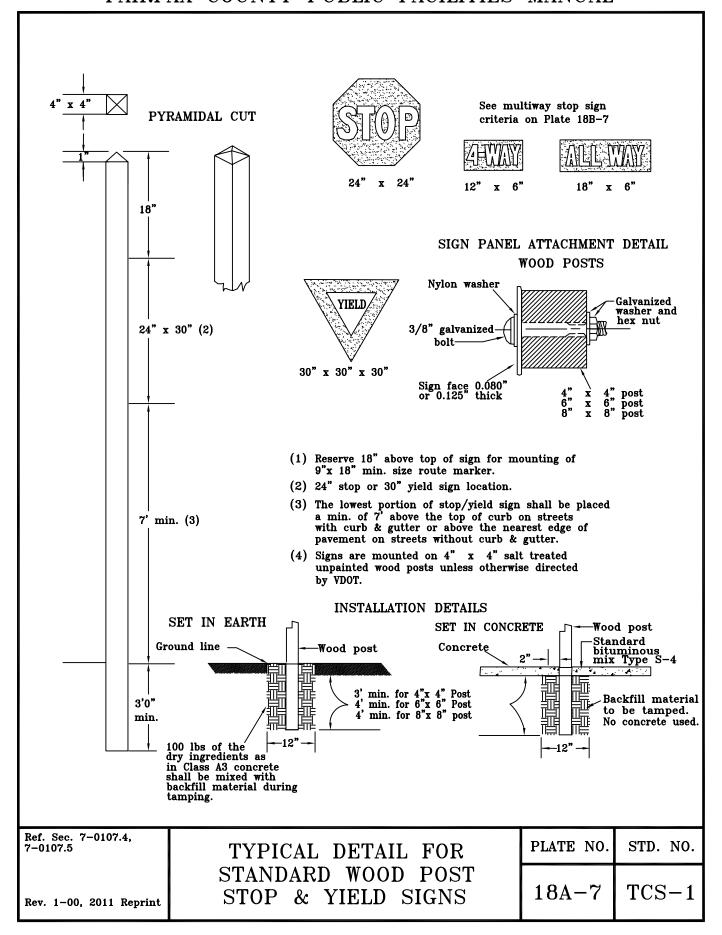


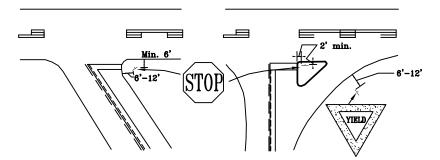


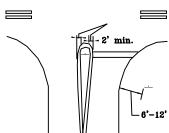
Exploded view of sawtooth fastener

See specification for this bracket in Section 7-0107.7

Ref. Sec. 7-0107.4, 7-0107.5, 7-0107.6, 7-0107.7	SPECIFICATIONS FOR CANTILEVERED	PLATE NO.	STD. NO.
Rev. 1-00. 2011 Reprint	POLE MOUNTED SIGN WING BRACKET	18-7	SNS-3



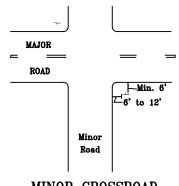


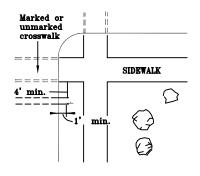


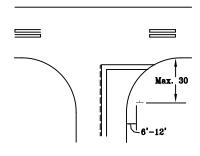
ACUTE ANGLE INTERSECTION

CHANNELIZED INTERSECTION

DIVISIONAL ISLAND



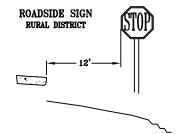




MINOR CROSSROAD

URBAN INTERSECTION

WIDE THROAT INTERSECTION



MULTIWAY STOP SIGNS

The "Multiway Stop" installation is useful as a safety measure at some locations. It should ordinarily be used only where the volume of traffic on the intersecting roads is approximately equal. A traffic control signal is more satisfactory for an intersection with heavy volume of traffic.

Any of the following conditions may warrant a multiway STOP sign installation.

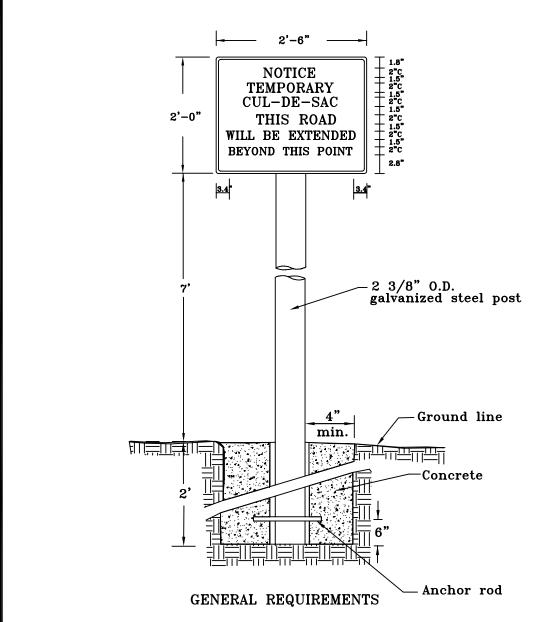
- 1. Where traffic signals are warranted and urgently needed, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.
- 2. An accident problem, as indicated by 5 or more reported accidents of a type susceptible of correction by a multiway stop installation in a 12-month period. Such accidents include right- and left-turn collisions as well as right-angle collisions.
- 3. Min. traffic volumes:
 - (a) The total vehicular volume entering the intersection from all approaches must average at least 500 VPH for any 8 hrs of an average day, and
 - (b) The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hr for the same 8 hrs, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the max. hr, but
 - (c) When the 85-percentile approach speed of the major street traffic exceeds 40 MPH, the min. vehicular volume warrant is 70% of the above requirements.

For placement of multiway stop sign identification plates reference the FHWA "Manual on Uniform Traffic Control Devices".

Ref. Sec. 7-0107.4, 7-0107.5, Plate 18A-7 Rev. 1-00, 2011 Reprint

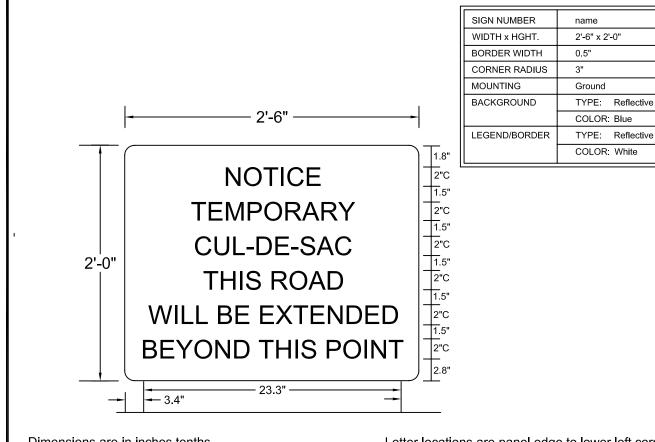
TYPICAL LOCATIONS FOR STOP AND YIELD SIGNS

PLATE NO.	STD. NO.
18B-7	TCS-2



- 1. Sign blank is to be of aluminum, 0.08" thickness.
- 2. Sign colors shall be white lettering on blue background with white border, with face of reflective 3M capsulated sheeting or equal.
- 3. Alternate sign designs or specific text such as "Leavitt Road will be extended to Almquist Drive" may be provided if approved by the Director.

Ref. Sec. 7-0107.4, 7-0107.5, 7-0404.12A	TEMPORARY CUL-DE-SAC	PLATE NO.	STD. NO.
Rev. 6-04, 2011 Reprint	SIGN	18C-7	PDS-1

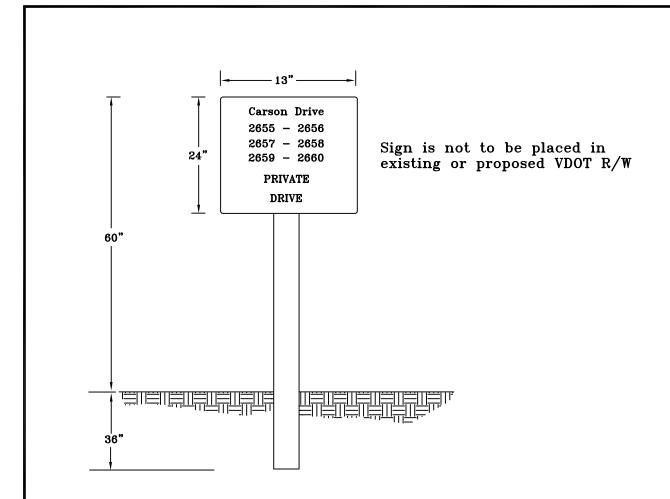


Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

	LETTER POSITION																	
																	LENGTH	VDOT STANDARD SER I ES.SIZE
N	0	Т	_	С	Е													C2
11.3	12.8	14.3	15.6	16.3	17.7												7.5	
Т	Е	М	Р	0	R	Α	R	Y										C2
8.4	9.8	11.1	12.9	14.3	15.9	17.3	18.9	20.3									13.1	
С	U	L	-	D	E	-	S	Α	С									C2
7.4	8.8	10.3	11.7	13.7	15.2	16.6	18.5	20.0	21.6								15.3	
Т	Н	I	S		R	0	Α	D										C2
8.9	10.2	11.7	12.4	13.5	15.5	16.9	18.4	20.0									12.3	
W	I	L	L		В	Е		Е	Х	T	Е	N	D	Е	D			C2
3.9	5.7	6.4	7.7	8.7	10.7	12.3	13.3	15.3	16.6	18.0	19.3	20.7	22.2	23.7	25.1		22.3	
В	Е	Y	0	N	D		Т	Н	ı	S		Р	0	I	N	Т		C2
3.4	4.9	6.1	7.7	9.3	10.8	11.9	13.9	15.2	16.7	17.4	18.5	20.5	21.9	23.5	24.2	25.7	23.3	

Ref. Sec. 7-0107.4, 7-0107.5,7-0404.12A,	TEMPORARY	CUL-DE-SAC	PLATE NO.	STD. NO.
6-04, 2011 Reprint	SIGN	DETAIL	18D-7	PDS-1



GENERAL REQUIREMENTS

The pipestem driveway sign shall contain the street name, the house numbers and the words "Private Drive" or "Private Street".

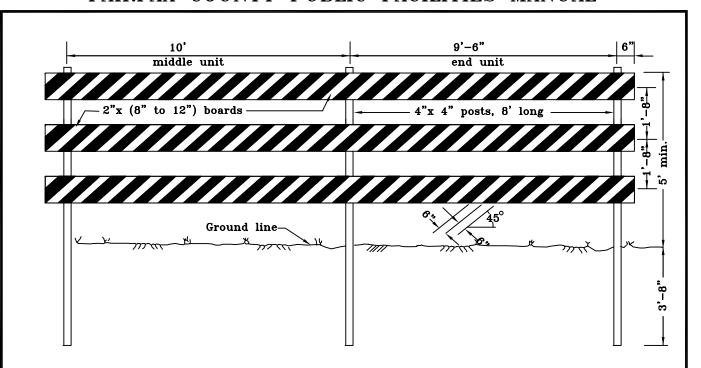
The sign is to be placed on a 3" "U" channel post 8' long.

The sign is to be placed on the right side of the pipestem drive when site distance permits.

The sign shall be made with reflective materials and be green with white border and standard 2" lettering.

Alternate design may be approved by the Director.

Ref. Sec. 7-0107.4, 7-0107.5, 7-0903.2	PIPESTEM DRIVEWAY	PLATE NO.	STD. NO.
Rev. 1-00, 2011 Reprint	SIGN	19-7	PDS-1



This barricade is to be placed at the end of all dead end streets.

Lumber dimensions are nominal sizes.

The reflectorized area shall have a smooth, sealed encapsulated lens material outer surface. The predominant color for other barricade components shall be white, except that unpainted galvanized metal or aluminum components may be used. Because of their vulnerable position and possible hazard they could create, barricades should be constructed of light weight materials and have no rigid stay bracing.

Planks are to be fastened to posts with 2-3/8" x 6 1/2" carriage bolts and washers or with 2-7/16"x 4" lag screws and washers. Bolts and screws are not to be placed closer than 2" from the edge of planks.

The following note shall appear on all plans: "The barricade shall be removed at such time as the need no longer exists, as determined by the Director." If the barricade is within VDOT R/W, a permit is needed for its removal.

CHARACTERISTICS

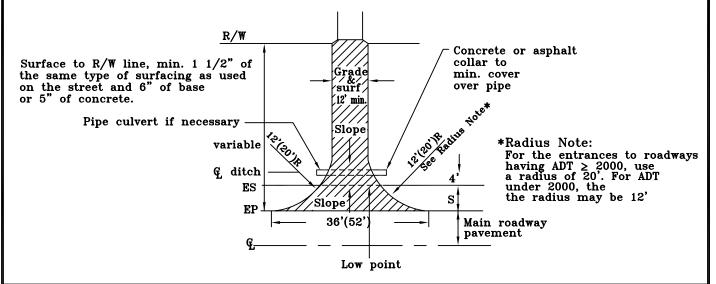
Color of stripes Width of rail Number of reflectorized rail faces Reflectorized red and reflectorized white 8" min. - 12" max.
3 if facing traffic in 1 direction 6 if facing traffic in 2 directions

This barricade and other traffic barricades are described in the latest edition of VDOT's Work Area Protection Manual Standards and Guidelines and MUTCD.

Ref. Sec. 7-0406.10				PLATE NO.	STD. NO.
Rev. 1-00	STANDARD	TRAFFIC	BARRICADE	20-7	TB-1

DRIVEWAY CULVERT PIPE INSTALLATION 9"cover over pipe 9"cover over pipe Low point -0" min.* 4'-0" min.*-Low point Driveway Shoulder Driveway slope slope Shoulder slope 3/4":1 slope 6"min. 3/4":1' 4:1 Slope min. 6" x 6"-#6 WWF WITH UNPAVED ROADSIDE DITCH WITH PAVED ROADSIDE DITCH

A paved ditch is required where soil conditions and runoff velocities will cause erosion.



Concrete pipe or corrugated metal pipe may be used. Indicate type and size on plans. Driveways shall be surfaced from edge of pavement to property line with the same type of surfacing as used on street.

All driveway grades shall start back of the shoulder line. In cut sections, sides of driveway shall be graded to a max. 3:1 slope. Lengths of culverts if not shown on plans shall be a min. of 20' For dimension of S, see Plate No. 1-7.

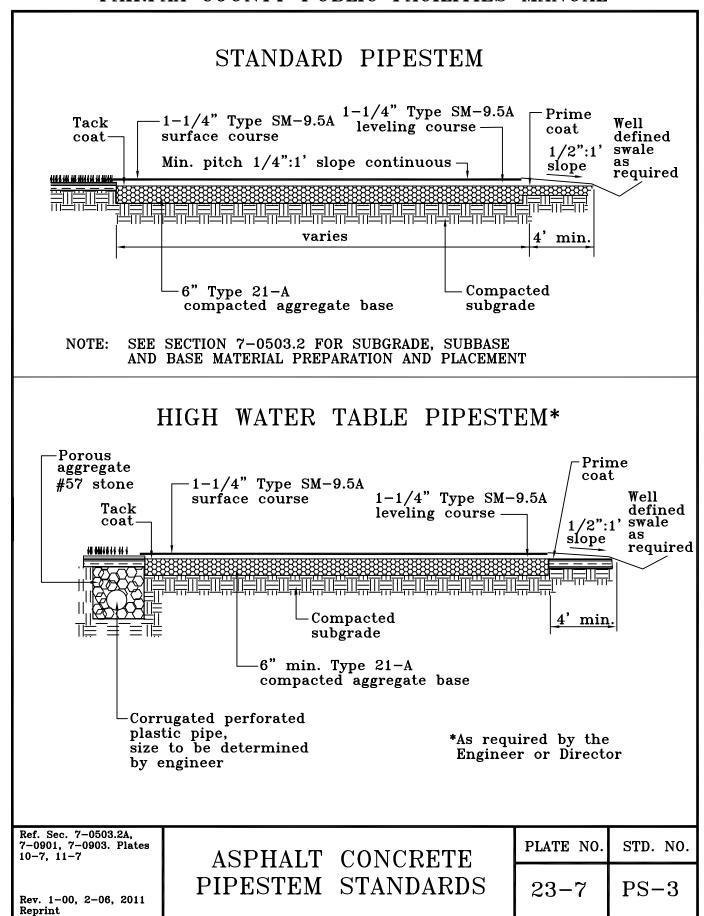
* Ditch line may be moved back to provide required cover. The transition of the ditch line shall be smooth with a min. length of 10'.

Driveway Clearances-

Grading plans must provide for adequate vehicular clearance for driveway approach, departure and breakover transitions. Driveway profiles are required when steep grades prevail.

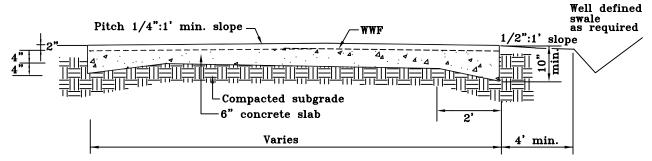
All materials and construction of this design in a R/W to be maintained by VDOT shall conform to the current VDOT Road and Bridge Specifications and VDOT Road and Bridge Standards.

Ref. Sec. 7-0503.1A	STANDARD DRIVEWAY	PLATE NO.	STD. NO.
Rev. 1-00, 11-05, 2011 Reprint	ENTRANCE STREETS-NO CURB & GUTTER	22-7	DE-5



WWF reinforcement shall consist of members rigidly attached at all joints or points of intersection. Longitudinal members shall be No. 2 gauge wire spaced at 6" OC. Transverse members shall be No. 4 gauge wire spaced at 12" OC. (Reinforcing Steel Institute designation 6 x 12 - W5.5 x W4)

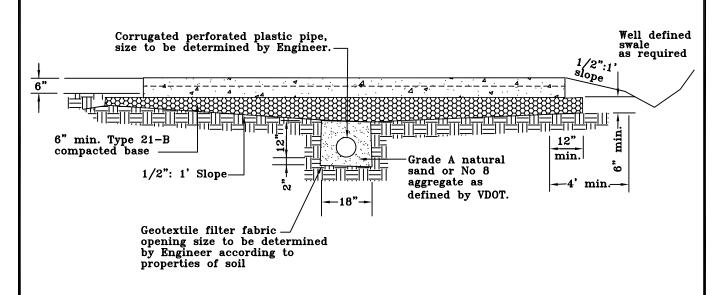
STANDARD PIPESTEM



Pipestem driveway underdrain is to be used when the driveway longitudinal gradient is 3% or more and when the underlying soil has 34% or more passing the No. 200 sieve and has a PI of 13 or less.

NOTE: SEE SECTION 7-0503.2 FOR SUBGRADE AND BASE MATERIAL PREPARATION AND PLACEMENT

HIGH WATER TABLE PIPESTEM



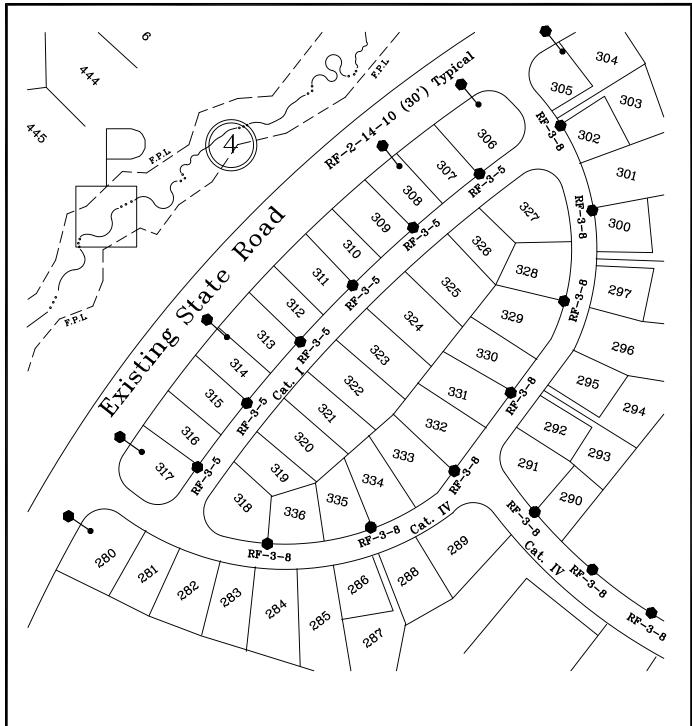
Ref. Sec. 7-0503.2A, 7-0901, 7-0903.2, 7-0903.2B, Plate 10-7, 11-7

Rev. 1-00, 2-06, 2011 Reprint CONCRETE
PIPESTEM STANDARDS

PLATE NO. STD. NO.

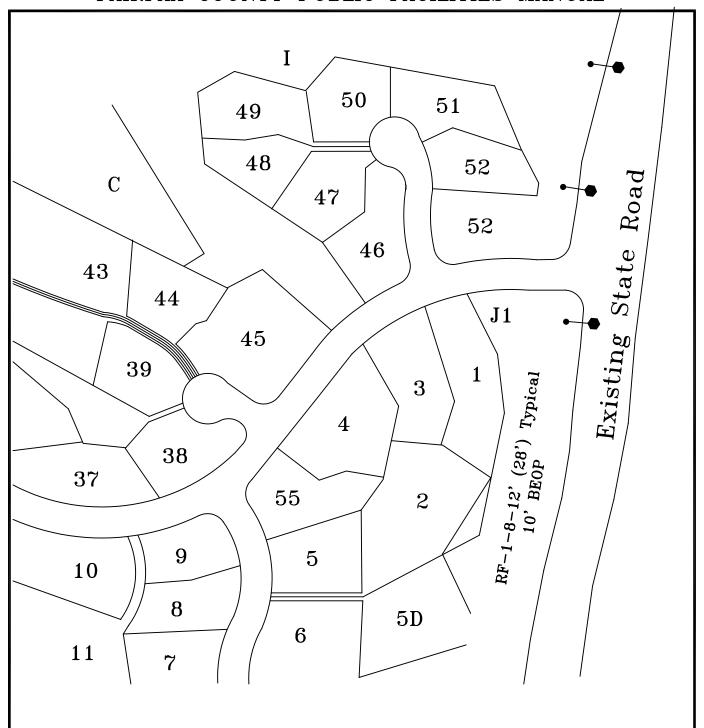
24 - 7

PS-3A



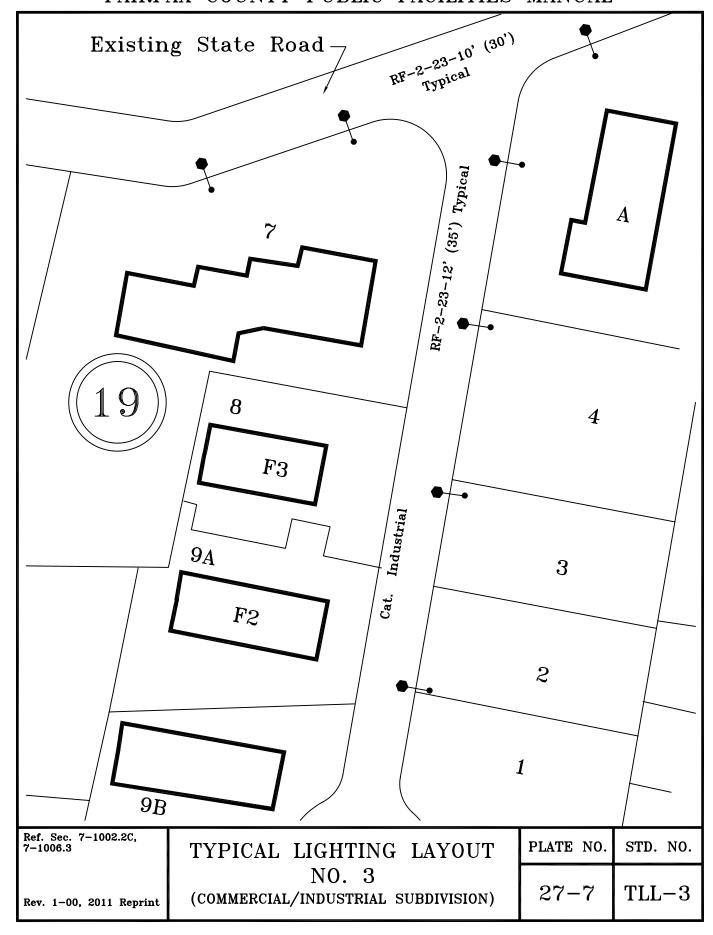
This lighting layout applies to subdivisions that have lots that are less than $18,000\ \text{ft}^2$

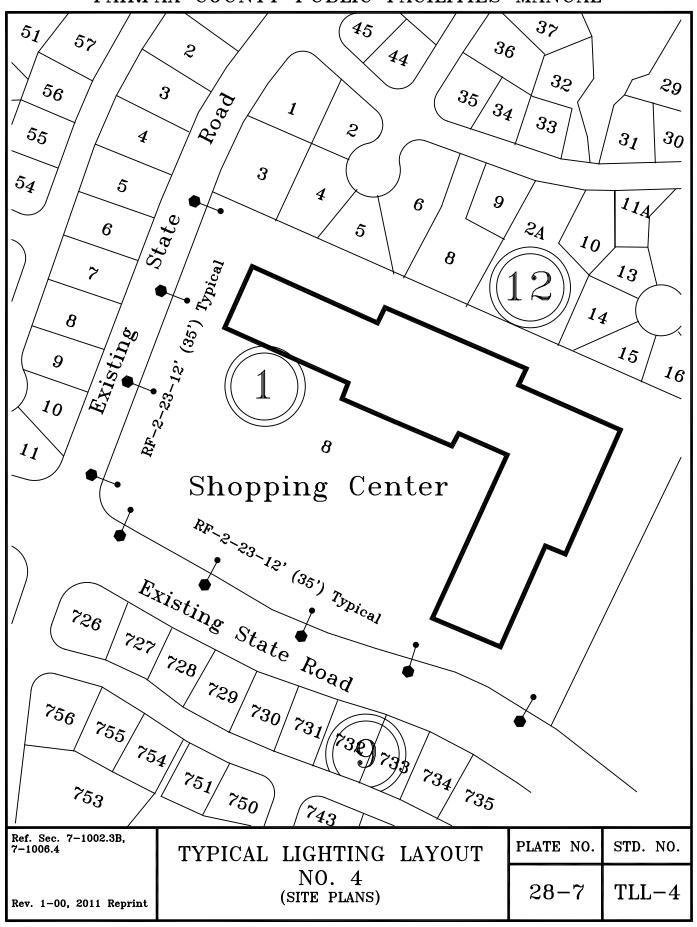
Ref. Sec. 7-1002.1A(3), 7-1006.1	TYPICAL LIGHTING LAYOUT	PLATE NO.	STD. NO.
Rev. 1-00, 2011 Reprint	NO. 1 (RESIDENTIAL SUBDIVISION)	25-7	TLL-1

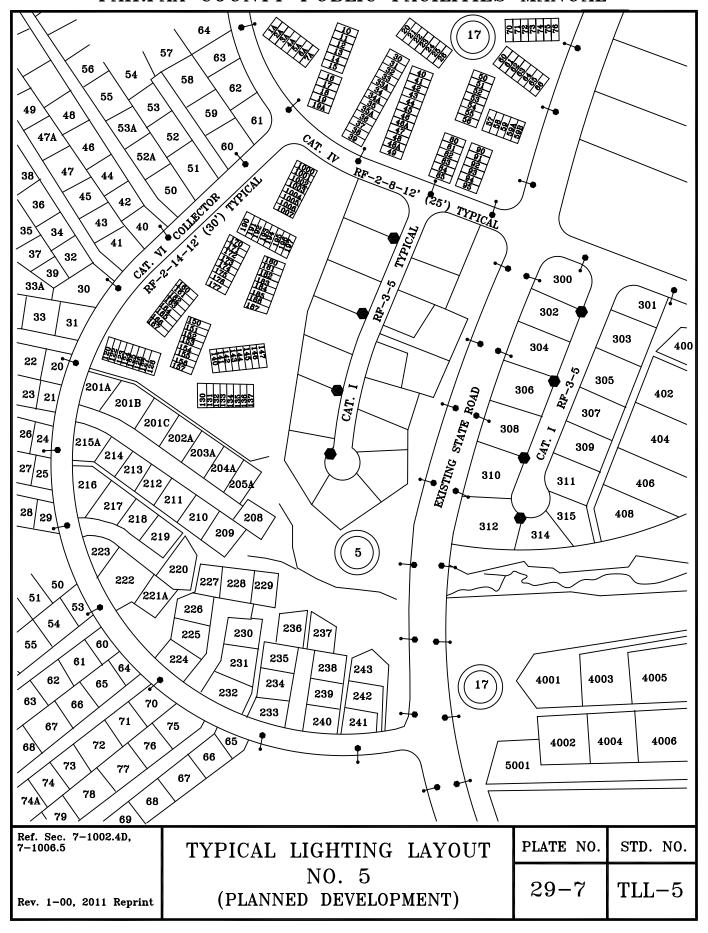


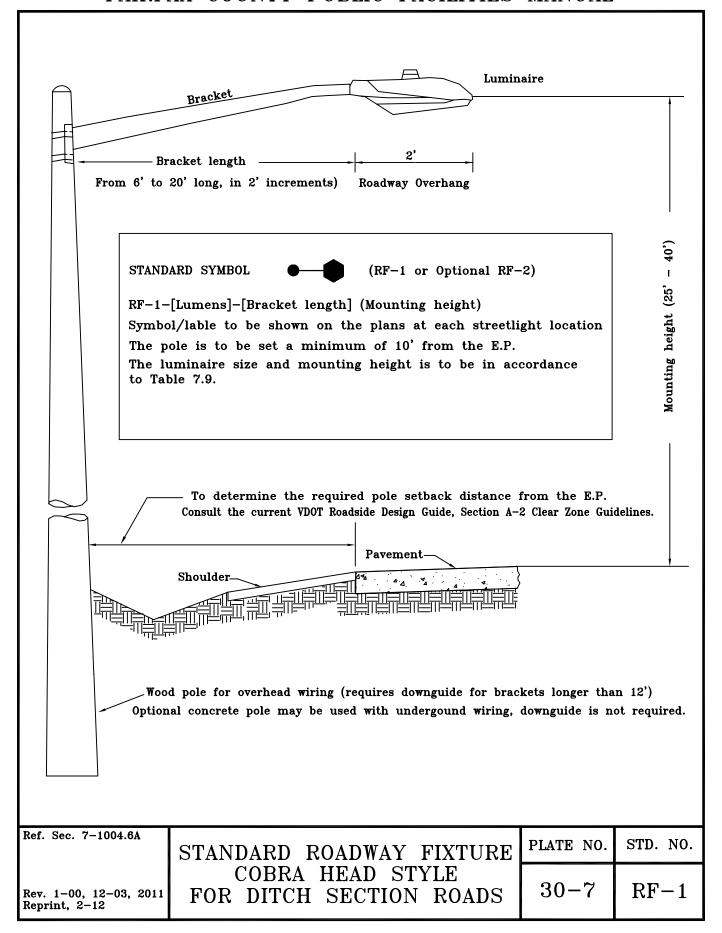
This lighting layout applies to subdivisions that have lots that are 18,000 FT² or greater.

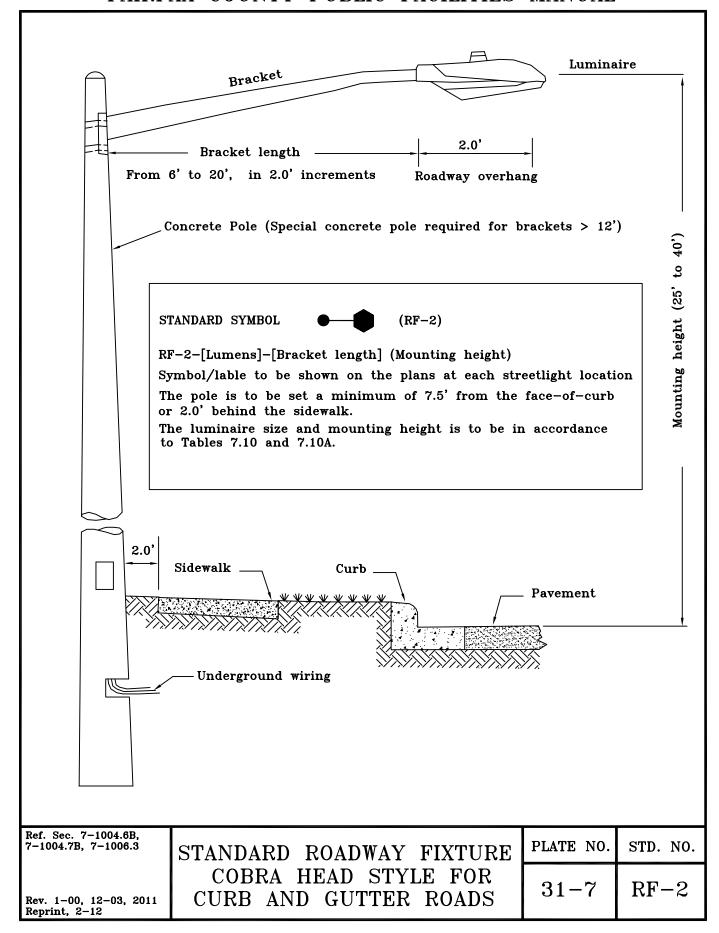
Ref. Sec. 7-1002.1B(3), 7-1006.2	TYPICAL LIGHTING LAYOUT	PLATE NO.	STD. NO.
Rev. 1-00, 2011 Reprint	NO. 2 (RESIDENTIAL SUBDIVISION)	26-7	TLL-2

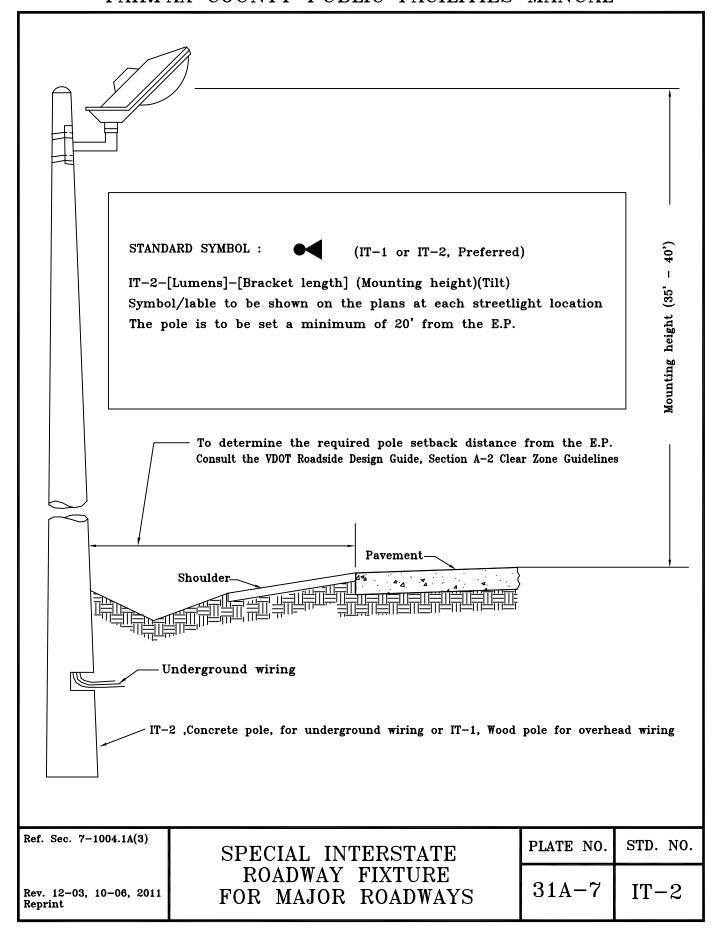










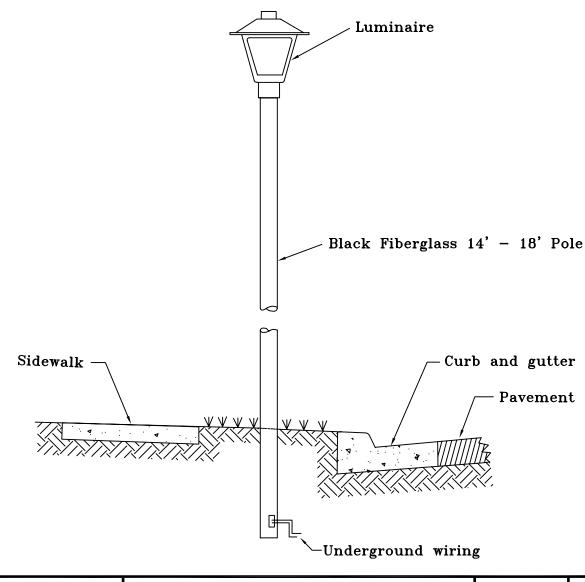


STANDARD SYMBOL (RF-3)

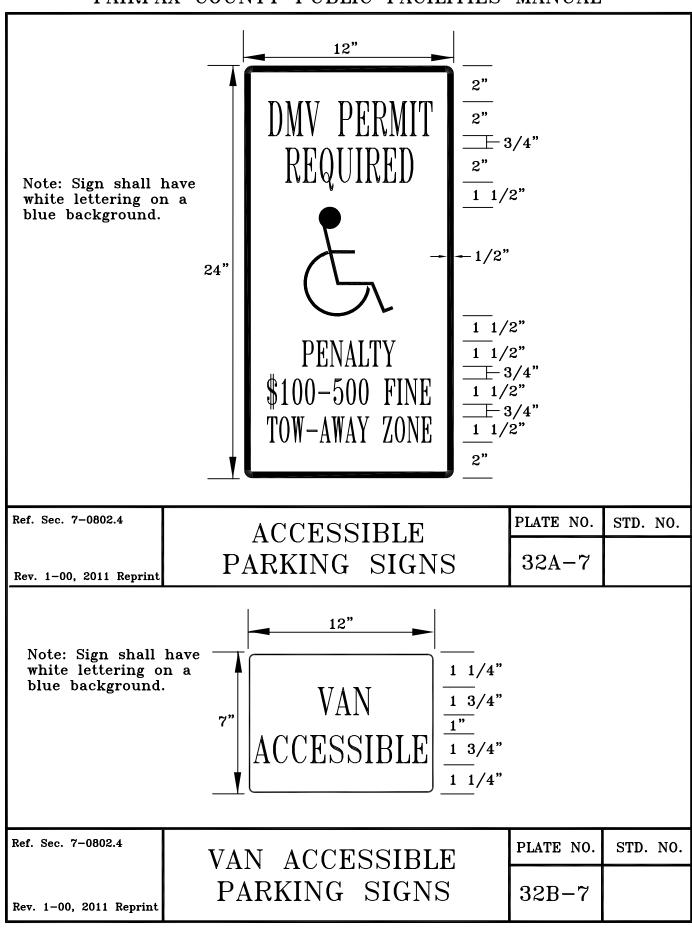
RF-3-[Lumen]-[Bracket Length] (Mounting Height)

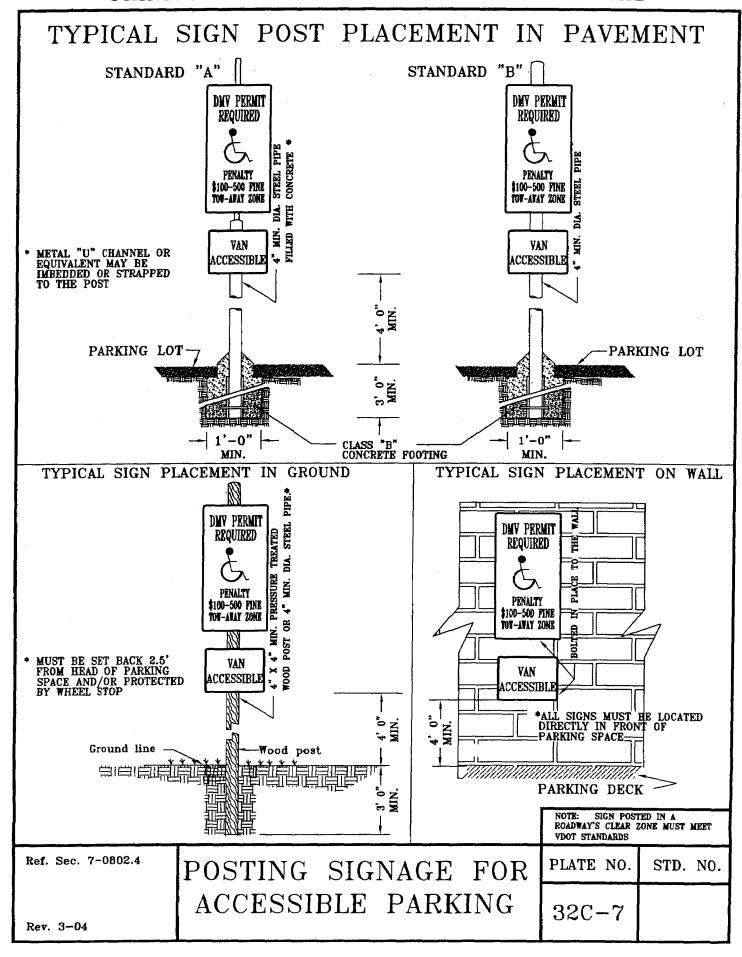
Symbol/label to be shown on the plans at each streetlight location. The pole is to be set in the utility strip in accordance with VDOT clear zone requirements.

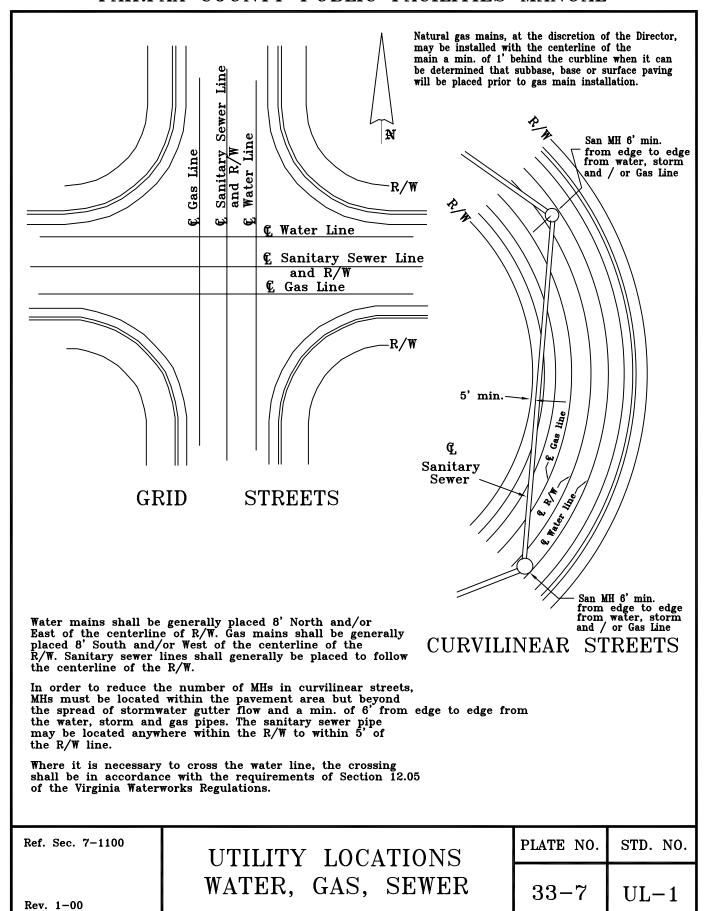
The luminaire size and mounting height are to be in accordance to Table 7.11.

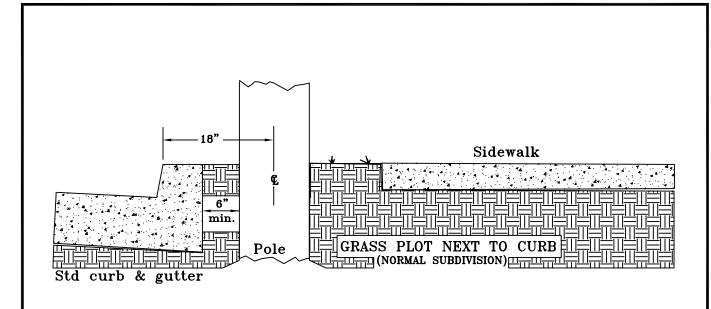


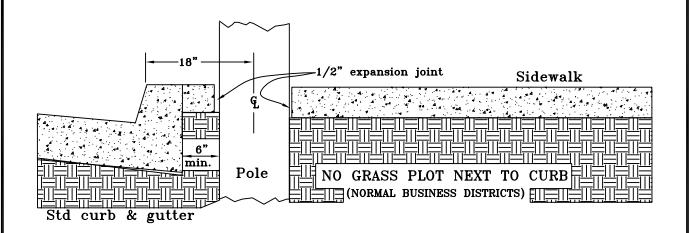
Ref. Sec. 7-1004.1A(2), 7-1004.6C, 7-1006.1B	COLONIAL STYLE FIXTURE	PLATE NO.	STD. NO.
Rev. 1-00, 11-05, 7-06, 2011 Reprint, 2-12	FOR SUBDIVISION ROADWAYS WITH CURB AND GUTTER	32-7	RF-3









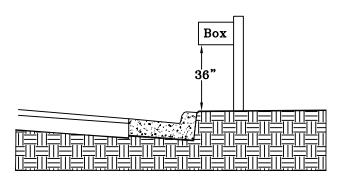


Poles shall be located behind the ditch line of ditch section streets.

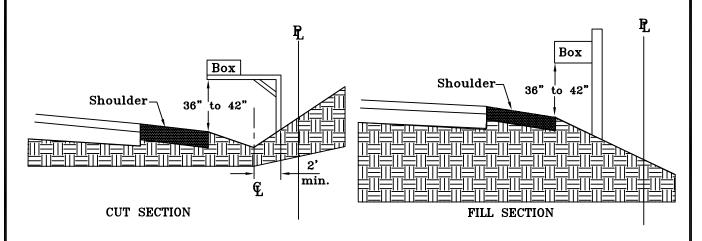
Poles to be located within a R/W to be maintained by VDOT require a permit from VDOT.

Ref. Sec. 7-1100	STANDARD	PLATE NO.	STD. NO.
Rev. 1-00	POLE LOCATIONS	34-7	UL-3

CURB AND GUTTER SECTION



DITCH SECTION STREET

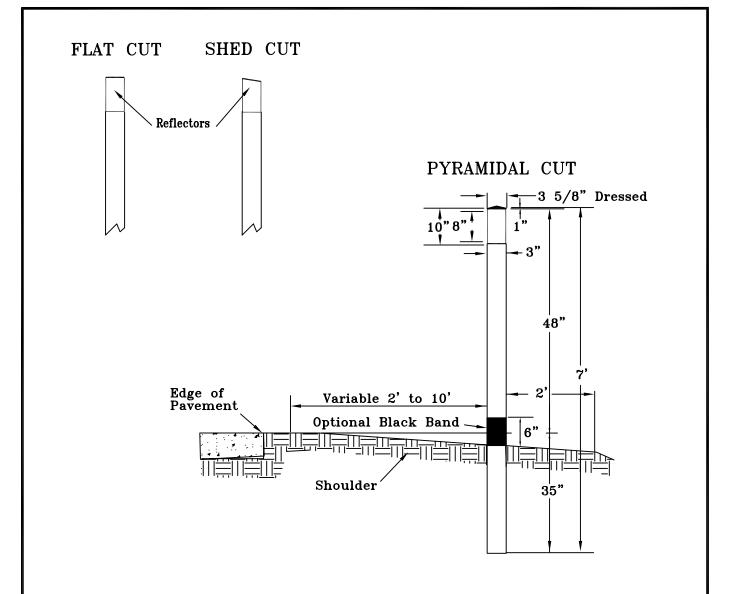


Notes:

- 1. On ditch section streets, face of mail box to be in line with back edge of shoulder.
- 2. On ditch section streets in cut, support for mail box to be min. 2' to the outside of the ditch line.
- 3. On curb and gutter section streets, face of box to be in line with back edge of curb line.
- 4. Mail box height shall be:

 - A) On ditch section, 36" to 42" from shoulder grade to bottom of box.
 B) On curb and gutter section, 36" from top of curb to bottom of box.
- 5. The face of the mail box and post shall be set, as shown on the fill section detail, within the radius of the DE-5 Entrance.

Ref. Sec. 7-1100		PLATE NO.	STD. NO.
Rev. 1-00	MAIL BOX LOCATION	35-7	MB-1



Location and spacing as per approved plans

These delineators consist of reflectorized sheeting, cut to a 3" by 8" vertical rectangle, mounted on a backing of aluminum alloy, not less than 0.063" thick. The color of the reflective sheeting shall, in all cases, conform to the color of the edge-lines. The reflectors are attached to wood posts with aluminum alloy nails or screws. The top of the posts may have a flat, shed, or pyramid cut; however, they shall be uniform throughout a project. Material specifications may be found in the VDOT Road and Bridge Specifications.

Ref. Sec. 7-0404.21C(2), 7-1100	ROAD EDGE	PLATE NO.	STD. NO.
Rev. 1-00, 2011 Reprint	DELINEATOR	36-7	RD-1